



COUNTY OF PLACER
Community Development Resource Agency

BUILDING

RESIDENTIAL ELECTRICAL SERVICE

Service entrance conductors requires approved insulation for wet location. Provide 18" of free conductor for attachment to service drops.

Service drop point of contact per Service Provider.

12" min, or 18" max, per Service Provider.

48" Max from Eave
Or 18" From Wall.

18" min service conductors clearance
If 300v or less between conductors and terminates in an approved support.

Blocking per Service Provider

Pipe strap per Service Provider.

Service entrance conduit size based on wire size & number of wires and insulation type. Min 1-1/4" conduit. Conduit above roof per Service Provider.

Service raceway to be secured within 18" of service head, within 36" of box and not to exceed 10' intervals on service conduit.

Threaded Boss or Hub approved for bonding with I.M.C. or R.M.C.—or bonding jumper with bonding type locknuts and bushings to enclosure.

Meter socket.

Bond neutral to enclosure.

Meter terminal fitting.

Label All Breakers

Main breaker or fusible switch required.

Service & portion of dead front covers not shown for clarity.

Neutral bus.

Bond neutral and ground conduit to enclosure with lug or bonding jumpers.

Ground electrode conductor (wire) protected if necessary by a conduit or armored grounding cable.

Bond to interior gas and water lines.

Approved accessible grounding clamp with access to exterior or building per Service Provider.

8' Driven Copper Rod 5/8" diam. min. or listed Rod

UFER: Required for new construction - #4 rebar or bare CU #4 wire 20' long & 2" min. from bottom of foundation.

GENERAL NOTES

This drawing is intended to illustrate the requirements, not a mandatory arrangement for services less than 4000' elev. & no heavy snow load. **Contact service provider where heavy snow loads may exist.**

Electrical Services Working Clearance

- 1) 30" min. width in front.
- 2) 36" min. clear depth in front.
- 3) 78" min. clear height.

100 AMP min. service if:

- 1) 6 or more 2 wire branch circuits or
- 2) Initial load of 10KW or more

For underground service requirements consult with Service Provider, switches, panel boards, conduit, etc.... shall be of a type approved for the installation by Underwriter Laboratory.

CONDUCTOR TYPES, SIZES & CONDUIT
RH-RHH-RHW-THW-THWN-THHN-XHHW

COPPER	ALUMINUM COPPER-CLAD AL	SERVICES RATING IN AMP	CONDUIT SIZE, 3 COND.
AWG	AWG		THW
4	2	100	1 1/4" MIN
3	1	110	1 1/4"
2	1/0	125	1 1/4"
1	2/0	150	1 1/4"
1/0	3/0	175	1 1/2"
2/0	4/0	200	2"

**SIZE OF GROUND ELECTRODE
CONDUCTOR & BONDING CONDUCTOR
ON SUPPLY SIDE OF SERVICE**

LARGEST SERVICE ENTRANCE WIRE		GROUNDING ELECTRODE & BONDING CONDUCTOR
COPPER	ALUM.	-COPPER-
#2	1/0 OR SMALLER	#8
#1 OR 1/0	2/0 OR 3/0	#6
#2/0 OR	4/0 OR 250KCMIL	#4

SEE CODE EXCEPTIONS 250-94

Distribution breakers to be located in area protected from snow build-up in locations above 3,500 ft. elev.